Notice of Allowability	Application No.	Applicant(s)	
	09/904,566	JOON-BO ET AL.	
	Examiner	Art Unit	
	Kenny Lin	2152	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *9/5/2007*.

2. ☒ The allowed claim(s) is/are *2-14 now renumbered as 1-13*.

3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a) ☒ All b) ☐ Some* c) ☐ None of the:
      1. ☒ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
      3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
   (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

DETAILED ACTION

1. Claims 2-16 are presented for examination. Claim 1 was canceled.

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Peter McKenna on November 1, 2007.

3. The application has been amended as follows:

2. (Previously Presented) The method of claim 3, wherein the steps (a) through (c) are repeated in a predetermined cycle.

3. (Currently Amended) A method for building up backup master information, comprising the steps of:

(a) receiving connection information from at least one of a plurality of slaves in a network, wherein the received connection information includes at least one of a received signal strength indication (RSSI) and link quality information, wherein the link quality information comprises an index of error rate in data transmission between a network master and each slave;

(b) determining a priority of said at least one of the plurality of slaves to be used as a backup master, when a network master disappears, according to at least one of the RSSI and the link quality information included in the received connection information; and

(c) announcing the determined priority to at least another one of the plurality of slaves prior to the network master disappearing.

4. (Original) The method of claim 3, wherein, in the step (b), if said at least one of the plurality of slaves has a higher RSSI than another one of the plurality of slaves, said at least one of the plurality of slaves is given a higher priority, which is used to choose a new network master.

5. (Original) The method of claim 3, wherein, in the step (b), if said at least one of the plurality of slaves has a higher link quality value than another one of the plurality of slaves, said at least one of the plurality of slaves is given a higher priority, which is used to choose a new network master.

6. (Previously Presented) The method of claim 3, wherein the network is a Personal Ad-hoc Network.

7. (Previously Presented) The method of claim 3, wherein in the step (c), the determined priority of the backup master is announced to the at least another one of the plurality of slaves, through a broadcasting channel.

8. (Previously Presented) A method for designating a new master of a network when a preexisting network master disappears, the method comprising the steps of:

(a) determining at a slave whether the preexisting network master has disappeared;

(b) if the preexisting network master has disappeared, checking a rank assigned to the slave by the preexisting network master which determined the rank based on connection information received from the slave by the preexisting network master, wherein the rank is used for choosing a new network master and is received before the disappearance of the preexisting network master; and

(c) changing the slave to the new network master if it is determined that the rank is highest of any one assigned to a plurality of slaves,

wherein the connection information received from the slave by the preexisting network master includes at least one of received signal strength indication (RSSI) and link quality information, the link quality information comprises an index of error rate in data transmission between the preexisting network master and each slave, and the preexisting network master determines the rank based on at least one of the received signal strength indication (RSSI) and the link quality information.

9. (Original) The method of claim 8, after the step (c), further comprising the step (d) of performing inquiry scan and page scan.

10. (Previously Presented) The method of claim 9, after step (d), further comprising the steps of:

(e) determining whether a new device attempts to establish a connection through the network;

(f) accepting a request of the new device for connection, requesting the new device to change to a role as a slave, and remaining as the new network master;

(g) storing information of the new device, and announcing the information of the new network master and each of the plurality of slaves linked throughout the network, to each of the plurality of slaves linked throughout the network; and

(h) checking for a change of a master mode if there is no connection request from the new device in step (e), returning to the step (d) when no change to the master mode is determined, and terminating the master mode when a change to the master mode is determined.

11. (Original) The method of claim 10, wherein, in the step (h), the change of the master mode is determined when a role of a device serving as the preexisting network master is changed to a role as one of the plurality of slaves, by a user, when a Bluetooth function of the preexisting network master is switched off, or when power of the preexisting network master is turned off.

12. (Original) The method of claim 8, wherein step (a) comprises the sub-steps of:

(a1) checking a connection status with the preexisting network master;

(a2) attempting to reconnect with the preexisting network master if disconnection is detected in sub-step (a1);

(a3) checking whether reconnection with the preexisting network master is successful, and returning to the sub-step (a1) if the reconnection with the preexisting network master is successful; and

(a4) determining whether the preexisting network master has disappeared, if reconnection with the preexisting network master is not established in sub-step (a3), and informing a host of the event as a "Disconnection Complete Event".

13. (Original) The method of claim 12, wherein the sub-step (a1) is repeated in a predetermined cycle while the connection with the preexisting network master remains.

14. (Currently Amended) A method for establishing a connection between a new master and a remaining plurality of slaves of a network when a preexisting network master disappears, the method comprising the steps of:

(a) checking whether the preexisting network master has disappeared;

(b) checking backup master rank information which is assigned to the slave by the preexisting network master which determined the backup master rank information based on connection information received by the preexisting network master from the slave, when it is determined that the preexisting network master has disappeared in the step (a);

(c) attempting to establish a connection with the new network master when it is determined that one of the remaining plurality of slaves does not have a highest priority, according to the backup master rank information; and

(d) remaining as one of the remaining plurality of slaves if a connection with the new network master is established in the step (c),

wherein the connection information received from the slave by the preexisting network master includes at least one of received signal strength indication (RSSI) and link quality information, the link quality information comprises an index of error rate in data transmission between the preexisting network master and each slave, and the preexisting network master determines the backup master rank information based on at least one of the received signal strength indication (RSSI) and the link quality information.

15. (Canceled).

16. (Canceled).

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenny Lin whose telephone number is (571) 272-3968. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on (571) 272-3913. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ksl
November 1, 2007